

Electronic Outlook Report from the Economic Research Service

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Sugar and Sweeteners Outlook

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U.S. Sugar July 2011

Projected U.S. sugar supply for fiscal year (FY) 2011 is reduced by 30,000 short tons, raw value (STRV). Imports from Mexico are reduced by 110,000 STRV due to much-reduced imports in June and lower than average monthly imports expected the rest of the fiscal year. Although the raw sugar tariff-rate quota (TRQ) was increased by 120,000 STRV on June 21, only 80,000 STRV is expected to be imported before the end of the fiscal year. Projected U.S. sugar use is increased by 50,000 STRV to reflect pace-to-date deliveries to the Sugar-Containing Product Re-Export Program. The net effect of these changes is to decrease ending-year stocks by 80,000 STRV to 1.527 million STRV, implying an ending-year stocks-to-use ratio of 13.3 percent.

For FY 2012, imports expected from Mexico are increased by 298,000 STRV to 1.453 million STRV, offsetting lower beginning stocks of 80,000 STRV. With no other supply or use changes, ending year stocks are projected to increase by 218,000 STRV to 1.274 million STRV. The implied stocks-to-use ratio is 11.1 percent, up from 9.2 percent last month.

Mexico sugar production in 2010/11 is reduced by 50,000 metric tons, raw value (MTRV) to 5.500 million MTRV to reflect the near-end of the sugarcane harvest season. Exports are reduced by 100,000 MTRV to reflect sharply lower exports in June and lower expected monthly exports the rest of the year. Sugar consumption is reduced 52,000 MTRV to reflect the lower than expected delivery pace through the first 8 months of the marketing year. In all, these use changes totaling 152,000 MTRV exceed the 50,000 MTRV supply reduction, implying an increase in ending stocks of 102,000 MTRV. The stock level is therefore estimated at 1.063 million MTRV, implying a stocks-to-consumption ratio of 24.8 percent.

Mexico sugar supply in 2011/12 is increased 102,000 MTRV to account for the rise in initial stock levels. Consumption of high fructose corn syrup in both 2010/11 and 2011/12 is expected to be at, or slightly above, 1.600 million metric tons, dry weight. This represents a reduction in both years of about 150,000 metric tons, dry weight, from last month. Sugar consumption is forecast down in 2011/12 at 4.332 million MTRV, a decrease of 128,000 MTRV. Much lower delivery levels in the first 8 months of 2010/11

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The next release is
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are the basis of these delivery reductions. Ending stocks are projected at 22 percent of sugar consumption – 953,000 MTRV. Projected exports are calculated residually at 1.318 million MTRV.

U.S. Sugar

On June 21, 2011, the U.S. Department of Agriculture (USDA) made important sugar policy announcements regarding increases in the raw sugar tariff-rate quota and marketing allotments for fiscal year (FY) 2011. On June 30, 2011, USDA's National Agricultural Statistics Service (NASS) published forecasts for area planted and harvested for both sugarbeets and sugarcane. On July 12, 2011, the USDA released its latest sugar supply and use estimates for FY 2011 and projections for FY 2012 in the *World Agricultural Supply and Demand Estimates* (WASDE) report.

Sugar Policy Announcements

On June 21, 2011, the USDA increased the FY 2011 raw sugar tariff-rate quota (TRQ) by 120,000 short tons raw value (STRV). The increase, however, is expected to yield a net increase in imports of only 80,000 STRV.¹ The increase is meant to mitigate some of the summer 2011 sugar supply risk associated with late sugarbeet plantings, uncertain Mexican imports, and a tight world sugar market. This increase in raw sugar imports is also intended to provide an adequate supply of sugar without the need for significant imports under the unrestricted high-tier tariff.

The USDA first announced details of the FY 2011 TRQ for raw sugar on August 5, 2010. It established the TRQ at 1,231,497 STRV (1,117,195 metric tons raw value (MTRV)), the minimum to which the United States is committed under the World Trade Organization (WTO) Uruguay Round Agreement on Agriculture. On April 12, 2011, USDA increased the raw cane sugar TRQ by 325,000 STRV to a total of 1,556,497 STRV. The increase occurring on June 21 brings the overall FY 2011 raw sugar TRQ to 1,676,497 STRV (1,520,892 MTRV).

The USDA stated that additional adjustments to import TRQs may be needed later in FY 2011 to ensure an adequate sugar supply for the domestic market to prevent market disruptions. Within the next few months USDA will announce the FY 2012 sugar tariff-rate quota, as well as whether the periods for entry of raw sugar under the FY 2011 and/or FY 2012 raw sugar TRQs will be extended as was done last fiscal year.

On June 21, 2011, the USDA increased the overall allotment quantity (OAQ) for domestic sugar marketing by 164,750 STRV to 9.400 million STRV. This action provides U.S. sugar producers with a minimum market share of 85 percent of domestic sugar deliveries for human consumption, as specified in the 2008 Farm Act. As also specified in the Act, the increase was split between beet and cane producers, with 54.35 percent (89,542 STRV) allocated to beet sugar producers and the remainder to cane sugar producers (75,208 STRV). Because the increased cane sugar allotment was greater than the domestic cane sugar supply, the surplus cane sugar allotment was reassigned from domestic sugarcane processors to raw sugar imports.

In an accompanying analysis, the Commodity Credit Corporation (CCC) determined that a total cane sugar allotment surplus of 600,000 STRV (which includes the 75,208 STRV allotment increase) must be reassigned to raw sugar imports. The reassignment was split between 480,000 STRV to Mexico raw sugar imports and 120,000 STRV to the raw sugar TRQ increase.

Beet Sugar Production

On June 30, 2011, NASS published forecasts for area planted and harvested for both sugarbeets and sugarcane. Area planted for sugarbeets is forecast at 1.238 million acres, a 5.6-percent increase over last year. All growing areas show increases over last year: Red River Valley (Minnesota and North Dakota), 7.4 percent; Great Plains (Colorado, Montana, Nebraska, Wyoming), 4.3 percent; Michigan, 3.4 percent; and Northwest (Idaho, Oregon), 3.1 percent. Forecast area harvested for sugarbeets is 1.197 million acres, 3.6 percent more than last year. The ratio of area harvested to area planted is 0.967, slightly above the 10-year weighted average of 0.959. The interesting aspect of

¹ In the USDA press release announcing the TRQ increase, it was stated that 110,000 STRV of raw cane sugar would enter as a result of the increase. However, the Interagency Commodity Estimation Committee for sugar increased TRQ imports by only 80,000 STRV in the July 2011 *World Agricultural Supply and Demand Estimates* report.

the acreage report for sugarbeets is the comparison of sugarbeet area planted with prospective plantings published by NASS at the end of March. Total area planted is forecast 4.25 percent higher than prospective plantings of 1.187 million acres. For the last 10 years, area planted has averaged below prospective plantings by only 0.8 percent.

Table 1 and figure 1 show details of regional area planted. The differences are centered in the Red River Valley (6.4 percent higher) and Michigan (4.8 percent higher). Both these areas faced very wet conditions during the normal planting season that forced much later plantings than usual. Figure 2 shows cumulative percentages of the crop planted from mid-April to early June for 2011/12, the previous year 2010/11, and an average of the 5 preceding years. Plantings in 2011/12 continued into early June, much later than normal. According to reports, plantings were increased to make up for the likelihood of lower than normal yields resulting from the late plantings.

Implications for FY 2012 beet sugar production are unclear: yields will likely be lower than normal, but plantings are increased to offset the yield effect. Table 2 shows implications for beet sugar production using a simple relationship between national sugar yield (sucrose recovered per acre) and national sugarbeet yield, with an adjustment for trend productivity growth. The relationship assumes that 1.197 million sugarbeet acres will be harvested, as set out in the NASS Acreage report.

There are seven possible cases. The first assumes base yields used in the May 2011 WASDE. If only area were changed in the scenario, the beet sugar production forecast would be 5.0 million STRV. The second case shows sugarbeet yields in the Red River Valley and Michigan at their 5-year average levels. Subsequent cases assume stepwise reductions from the 5-year average. The final scenario has sugarbeet yields at 90 percent of the 5-year average in both the Red River Valley and Michigan. The second column shows the effect of lowering the regional yields on the national average. The next two columns show the resulting sugarbeet crop and beet sugar production.

If sugarbeet yields in both regions were only 5 percent lower than average, beet sugar would be forecast at 4.812 million STRV (a projection close to the 4.8 million STRV forecast in last month's WASDE). If sugarbeet yields in both regions were 10 percent lower than average, beet sugar would be forecast at 4.694 million STRV, about 100,000 STRV less. With the range of outcomes centered between 4.70 and 4.80 million STRV, the Interagency Commodity Estimates Committee (ICEC) for sugar kept the beet sugar production projection at 4.80 million, at least till next month. NASS makes its first forecast of sugarbeet yields in the August *Crop Production*.

Cane Sugar Production

NASS forecasts area harvest for sugarcane at 889,000 acres, an increase of 1.3 percent above last year. Area projections in all States except Florida are close to those of last year – Florida area harvested is forecast 3.3 percent higher at 405,000 acres.

The sugar ICEC did not change any of the cane sugar production forecasts from last month's levels. They are: Florida, 1.630 million STRV; Louisiana, 1.440 million STRV; Texas, 150,000 STRV; and Hawaii, 170,000 STRV. These forecasts total 3.390 million STRV - 244,000 STRV more than last year. Although there is concern in Florida regarding extremely dry conditions affecting production, the Florida processors' forecast published in the Farm Service Agency's *Sweetener Market Data* of 1.666 million STRV is close to the USDA forecast.

Trade

Imports from Mexico are reduced by 110,000 STRV to 1.404 million STRV due to much-reduced imports in June and lower than average monthly imports expected the rest of the fiscal year. Sugar imports through the end of May are estimated at 1.241 million STRV. This total implies a monthly average for the first 8 months of 155,100 STRV. At the time that the sugar ICEC met to discuss the upcoming July 2011 WASDE, the Foreign Agricultural Service estimated that entries in June had amounted to only 22,000 STRV. Although the ICEC had been expecting a decrease in monthly imports in the final third of the fiscal year, this low June total indicated that a lower estimate for the fiscal year was in order.

As discussed above, the raw sugar TRQ was increased by 120,000 STRV on June 21. However, only 80,000 STRV is expected to be imported before the end of the fiscal year. There has been no announcement regarding the sugar

Table 1--Forecast changes in U.S. sugarbeet area planted

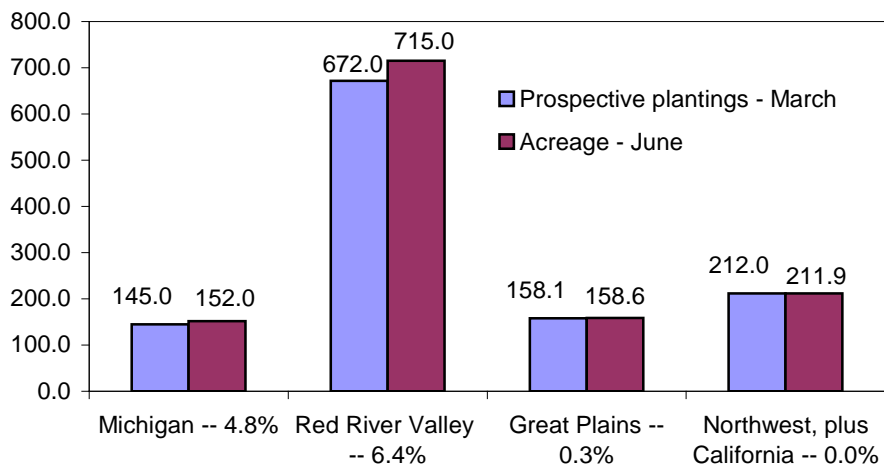
	Prospective plantings - March 1,000 acres	Acreage - June	Regional area expansion Percent
Michigan	145.0	152.0	4.8%
Red River Valley	672.0	715.0	6.4%
Minnesota	445.0	475.0	
North Dakota	227.0	240.0	
Great Plains	158.1	158.6	0.3%
Colorado	30.2	29.3	
Montana	45.9	44.8	
Nebraska	55.0	53.0	
Wyoming	27.0	31.5	
Northwest	187.0	186.9	-0.1%
Idaho	177.0	176.0	
Oregon	10.0	10.9	
California	25.0	25.0	0.0%
Total	1,187.1	1,237.5	4.2%

Source: USDA, NASS, *Prospective Plantings* (March 2011) and *Acreage* (June 2011).

Figure 1

Forecast changes in 2011/12 U.S. sugarbeet area planted

1,000 acres

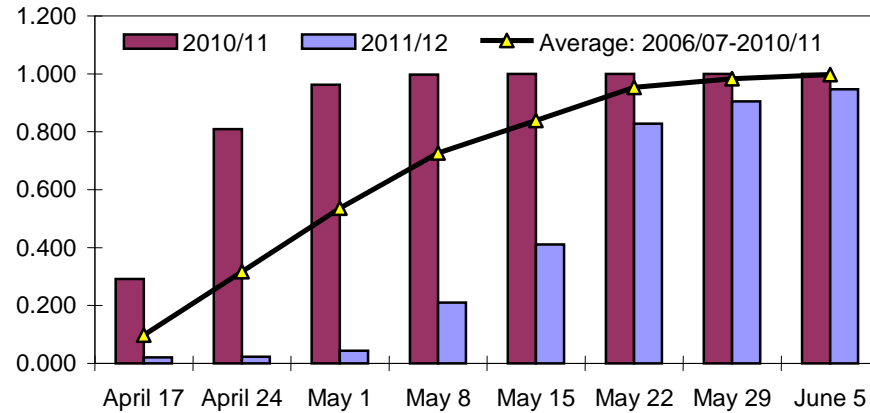


Source: USDA, NASS, *Prospective Plantings* (March 2011), *Acreage* (June 2011).

Figure 2

Sugarbeets planted in Michigan, Minnesota, North Dakota: Comparison of 2011/12 with 2010/11 and 5-year average since 2006/07

Percentage planted

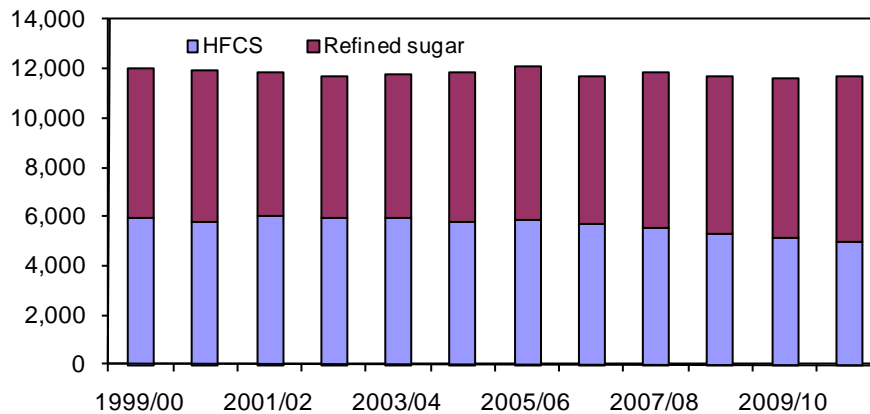


Source: USDA, NASS, *Crop Progress*.

Figure 3

Combined deliveries of refined sugar and high fructose corn syrup (HFCS), first 8 months of fiscal year (Oct.-May), 1999/2000-2010/11

1,000 short tons



Source: USDA, FSA, *Sweetener Market Data* (sugar); ERS, Sugar and Sweetener Team (HFCS).

Table 2--Projections of U.S. sugarbeet and beet sugar production for 2011/12 with various assumptions about sugarbeet yields in Red River Valley (RRV) and Michigan (MI) 1/

Case	Adjustment to yield in RRV and MI 2/	National yield Tons per acre	Sugarbeet crop 1,000 tons	Beet sugar 1,000 tons, raw value
1	Base yield	27.14	32,485	4,997
2	RRV and MI yield = 5-year (yr.) average (av.)	26.66	31,914	4,931
3	RRV = 0.95 of 5-yr. av.; MI = 5-yr. av.	25.96	31,069	4,834
4	RRV = 0.95 of 5-yr. av.; MI = 0.95 of 5-yr. av.	25.80	30,881	4,812
5	RRV = 0.90 of 5-yr. av.; MI = 5-yr. av.	25.25	30,223	4,737
6	RRV = 0.90 of 5-yr. av.; MI = 0.95 of 5-yr. av.	25.09	30,036	4,715
7	RRV = 0.90 of 5-yr. av.; MI = 0.90 of 5-yr. av.	24.94	29,849	4,694

1/ Assumes State-level harvested area forecasts contained in Acreage Report, NASS, USDA, June 30, 2011.

2/ Base yield (tons per acre): Minnesota = 25.49; North Dakota = 25.43; Michigan = 25.56.

5-year average yield (tons per acre): Minnesota = 24.74; North Dakota = 24.70; Michigan = 25.14.

Source: USDA, Economic Research Service, Sugar and Sweetener Team.

TRQ for FY 2012. In the WASDE, the FY 2012 forecast level reflects the import level to which the United States is bound under commitments to the World Trade Organization (WTO) and several Free Trade Agreements.

Tables 3 and 4 detail the components of U.S. sugar imports for both FY 2011 and FY 2012. Imports from Mexico in FY 2012 are increased by 298,000 STRV to 1.453 million STRV. A detailed discussion of the increase is contained in the Mexico chapter of this report.

Last year, on August 19, 2010, the USDA announced that sugar entering the United States under the FY 2011 raw sugar import TRQ would be permitted to enter U.S. Customs territory beginning September 1, 2010, a month earlier than the usual first entry date of October 1, and that sugar entering the United States under the FY 2010 raw sugar TRQ would be permitted to enter U.S. Customs territory until October 31, 2010, a month later than the usual last entry date. These actions were made in response to tightness in the U.S. raw sugar market and were authorized under the Additional U.S. Note 5(a) (iv) of Chapter 17 of the U.S. Harmonized Tariff Schedule. No decision has been made on whether to repeat this arrangement for FY 2011 and FY 2012.

Deliveries

Sugar deliveries for human consumption are unchanged from last month: 11.0 million STRV for FY 2011 and 11.125 million STRV for FY 2012.

Prior to FY 2008, deliveries for human consumption were averaging less than 9.900 million STRV annually (the average for FY 2001-07 was 9.869 million STRV). With the implementation of the North American Free Trade Agreement on January 1, increased imports of sugar from Mexico have contributed to additional sugar consumption, mostly at the expense of high fructose corn syrup (HFCS) consumption. Figure 3 shows combined refined sugar and HFCS since FY 2000. Joint annual consumption has been at or slightly below 12.0 million tons. The decrease in HFCS deliveries accelerated in FY 2008. Figure 4 shows the refined sugar-HFCS tradeoff over the 11 years since FY 2000.

Deliveries to food manufacturers under the Sugar-Containing Product Re-Export Program are increased by 50,000 STRV to reflect pace-to-date deliveries. The net effect of all changes discussed above is to decrease FY 2011 ending-year stocks by 80,000 STRV to 1.527 million STRV, implying an ending year stocks-to-use ratio of 13.3

percent. Ending stocks for FY 2012 are increased 218,000 STRV (more imports from Mexico, offset partially by lower beginning stocks) to 1.274 million STRV, implying a stocks-to-use ratio of 11.1 percent.

Prices

U.S. sugar prices have remained at higher-than-historical levels. From January 2011 through the end of June, raw sugar prices (nearby Intercontinental Exchange (ICE) futures contract 16) averaged 37.80 cents per pound. The average for June was 35.65 cents per pound. The beet sugar price (low end of Midwest range from the *Milling and Baking News*) averaged 55.13 cents per pound the first half of 2011 and averaged 55 cents per pound in June. Figure 5 shows the margin between the U.S. raw sugar price and the world raw price (nearby ICE contract 11). Although the FY 2011 raw sugar TRQ was increased by 325,000 STRV on April 12, the margin between U.S. and world raw sugar prices continued to increase until early May, when the margin was nearly 15 cents per pound. Since then, the margin has been steadily decreasing, thereby lessening the likelihood of imports at the high-tier tariff rate. When the second TRQ increase was announced on June 21, the margin fell but is now in the 7-8 cent per pound range.

Table 3--USDA estimate of sugar imports in FY 2011

	Metric tons, raw value	Short tons, raw value
Raw sugar TRQ	1,520,892	1,676,497
Less shortfall attributable to Mexico 1/	0	0
Less other shortfall	-78,925	-87,000
Plus FY 2010 TRQ entries in October 2010	32,971	36,344
Less FY 2011 TRQ entries in September 2010	-37,007	-40,793
Total raw sugar TRQ	1,437,931	1,585,048
Refined sugar TRQ		
Allocation to Canada	10,300	11,354
Allocation to Mexico	2,954	3,256
Less Mexican shortfall 1/	-2,954	-3,256
Global	7,090	7,815
Specialty		
Base	1,656	1,825
Additional	77,111	85,000
Total refined sugar TRQ	96,157	105,995
CAFTA/DR TRQ - calendar 2011	125,700	138,561
Other:		
Singapore, Bahrain, Jordan	20	22
Peru	2,000	2,205
Total estimate TRQ entries	1,661,808	1,831,829
Mexico	1,273,491	1,403,769
Re-export program imports	272,155	300,000
Sugar syrups, high-tier	18,144	20,000
Total projected imports	3,225,598	3,555,598

1/ Total entries from Mexico, quota and non-quota, reflected below.

Source: USDA, Foreign Agricultural Service.

Table 4--USDA estimate of sugar imports in FY 2012

	Metric tons, raw value	Short tons, raw value
Raw sugar TRQ	1,117,195	1,231,497
Less shortfall attributable to Mexico 1/	-7,258	-8,001
Less other shortfall	-117,027	-129,000
Total raw sugar TRQ	992,910	1,094,496
Refined sugar TRQ		
Allocation to Canada	10,300	11,354
Allocation to Mexico	2,954	3,256
Less Mexican shortfall 1/	-2,954	-3,256
Global	7,090	7,815
Specialty		
Base	1,656	1,825
Additional	0	0
Total refined sugar TRQ	19,046	20,995
CAFTA/DR TRQ - calendar 2011	128,020	141,118
Other:		
Singapore, Bahrain, Jordan	21	23
Peru	2,000	2,205
Total estimate TRQ entries	1,141,997	1,258,836
Mexico	1,318,153	1,453,000
Re-export program imports	317,518	350,000
Sugar syrups, high-tier	9,072	10,000
Total projected imports	2,786,740	3,071,836

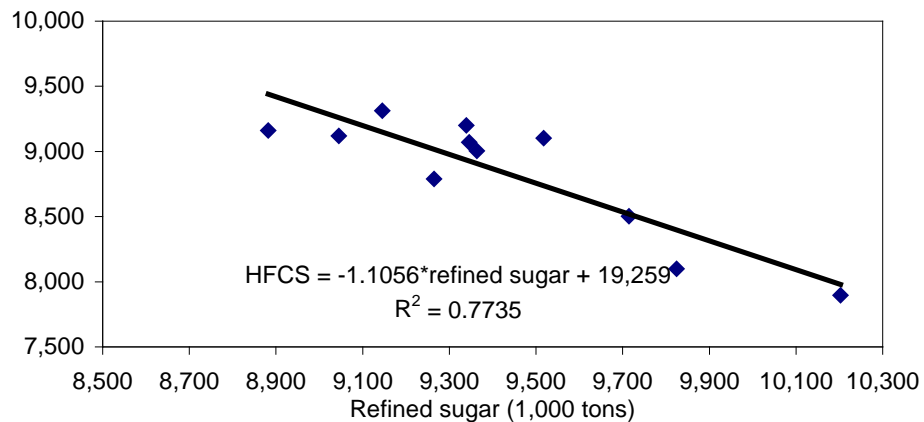
1/ Total entries from Mexico, quota and non-quota, reflected below.

Source: USDA, Foreign Agricultural Service.

Figure 4

Relationship between deliveries of refined sugar and high fructose corn syrup (HFCS), 1999/00-2009/10

HFCS (1,000 tons, dry weight)

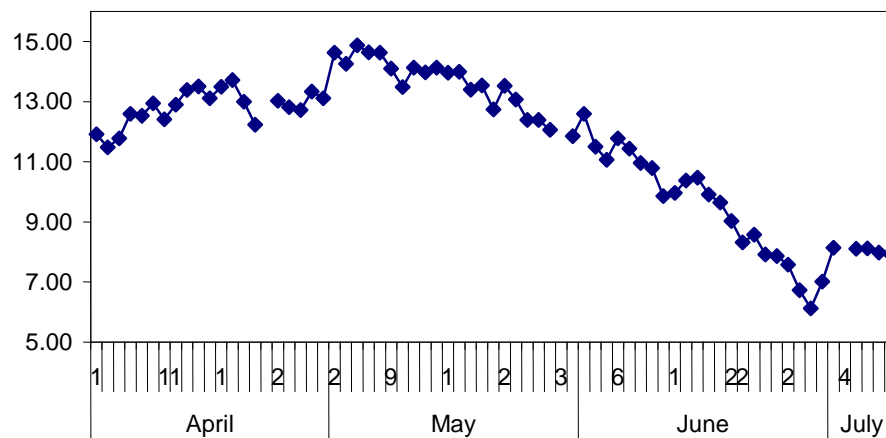


Source: USDA, FSA, *Sweetener Market Data* (sugar); ERS, Sugar and Sweetener Team (HFCS).

Figure 5

Margin between U.S. and world raw sugar prices, April-July 2011

Cents per pound



Source: ICE, nearby futures contracts no. 11 and 16.

Table 5--U.S. sugar: supply and use, by fiscal year 1/, 7/18/11

Items	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
<i>1,000 short tons, raw value</i>												
Beginning stocks 2/	2,216	2,180	1,528	1,670	1,897	1,332	1,698	1,799	1,664	1,534	1,510	1,527
Total production 3/ 4/	8,769	7,900	8,426	8,649	7,876	7,399	8,445	8,152	7,531	7,975	7,946	8,190
Beet sugar	4,680	3,915	4,462	4,692	4,611	4,444	5,008	4,721	4,214	4,575	4,800	4,800
Cane sugar	4,089	3,985	3,964	3,957	3,265	2,955	3,438	3,431	3,317	3,400	3,146	3,390
Florida	2,057	1,980	2,129	2,154	1,693	1,367	1,719	1,645	1,577	1,646	1,433	1,630
Louisiana	1,585	1,580	1,367	1,377	1,157	1,190	1,320	1,446	1,397	1,481	1,400	1,440
Texas	206	174	191	175	158	175	177	158	152	112	143	150
Hawaii	241	251	276	251	258	223	222	182	192	161	170	170
Puerto Rico	0	0	0	0	0	0	0	0	0	0		
Total imports	1,590	1,535	1,730	1,750	2,100	3,443	2,080	2,620	3,082	3,319	3,556	3,072
Tariff-rate quota imports 5/	1,277	1,158	1,210	1,226	1,408	2,588	1,624	1,354	1,370	1,854	1,832	1,259
Other Program Imports	238	296	488	464	500	349	390	565	308	450	300	350
Non-program imports	76	81	32	60	192	506	66	701	1,404	1,014	1,424	1,463
Mexico 6/							60	694	1,402	807	1,404	1,453
Total Supply	12,575	11,615	11,684	12,070	11,873	12,174	12,223	12,571	12,277	12,828	13,012	12,789
Total exports 3/	141	137	142	288	259	203	422	203	136	211	250	200
Quota-exempt for reexport	141	137	142	288	259	203	422	203	136	211	250	200
Other exports	0	0	0	0	0	0	0	0	0	0	0	0
CCC disposal, for export	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous	123	-24	161	23	94	-67	-132	0	0	-45	0	0
CCC disposal, for domestic non-food use	10	0	0	0	0	0	0	0	0	0	0	0
Refining loss adjustment	0	0	0	0	0	0	0	0	0	-45	0	0
Statistical adjustment 7/	113	-24	161	23	94	-67	-132	0	0	0	0	0
Deliveries for domestic use	10,132	9,974	9,711	9,862	10,188	10,340	10,135	10,704	10,607	11,152	11,235	11,315
Transfer to sugar-containing products												
for exports under reexport program	98	156	183	142	121	106	169	141	120	201	195	150
Transfer to polyhydric alcohol, feed	33	33	24	41	48	51	53	61	46	35	40	40
Deliveries for domestic food and beverage use 8/	10,000	9,785	9,504	9,678	10,019	10,184	9,913	10,501	10,441	10,917	11,000	11,125
Total Use	10,396	10,087	10,014	10,172	10,542	10,476	10,424	10,907	10,743	11,318	11,485	11,515
Ending stocks 2/	2,180	1,528	1,670	1,897	1,332	1,698	1,799	1,664	1,534	1,510	1,527	1,274
Privately owned	1,395	1,316										
CCC	784	212										
<i>Percent</i>												
Stocks-to-use ratio	20.97	15.15	16.68	18.65	12.63	16.21	17.25	15.26	14.28	13.35	13.30	11.06

NOTE: Numbers may not add due to rounding.

1/ Fiscal year beginning October 1. 2/ Stocks in hands of primary distributors and CCC. 3/ Historical data are from FSA (formerly ASCS) *Sweetener Market Data* (SMD), and NASS, Sugar Market Statistics prior to 1992. 4/ Production reflects processors' projections compiled by the Farm Service Agency. 5/ Actual arrivals under the tariff-rate quota (TRQ) with late entries, early entries, and (TRQ) overfills assigned to the fiscal year in which they actually arrived. The 2010/11 available TRQ assumes shortfall of 90,256 tons. 6/ Starting in 2007/08, total includes imports under Mexico's WTO TRQ allocation for raw and refined sugar. 7/ Calculated as a residual. Largely consists of invisible stocks change.

8/ For FY 2008-09, combines SMD deliveries for domestic human use, SMD miscellaneous uses, and the difference between SMD imports and *World Supply and Demand Estimates* imports.

Source: USDA, Foreign Agricultural Service, World Supply and Demand Estimates (WASDE).

Table 6 --U.S. sugar: supply and use (including Puerto Rico), fiscal years, metric tonnes 1/. 7/18/11

Items	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
<i>1,000 metric tons, raw value</i>												
Beginning stocks 2/	2,010	1,977	1,386	1,515	1,721	1,208	1,540	1,632	1,510	1,392	1,370	1,385
Total production 3/ 4/	7,955	7,167	7,644	7,846	7,145	6,712	7,662	7,396	6,832	7,235	7,209	7,430
Beet sugar	4,245	3,552	4,048	4,257	4,183	4,032	4,543	4,283	3,822	4,151	4,354	4,354
Cane sugar	3,710	3,615	3,596	3,590	2,962	2,681	3,119	3,113	3,009	3,084	2,854	3,075
Florida	1,866	1,796	1,932	1,954	1,536	1,240	1,559	1,492	1,431	1,493	1,300	1,479
Louisiana	1,438	1,433	1,240	1,249	1,049	1,079	1,198	1,312	1,267	1,344	1,270	1,306
Texas	187	158	173	159	143	159	161	143	138	101	130	136
Hawaii	219	227	251	228	234	202	201	165	174	146	154	154
Puerto Rico	0	0	0	0	0	0	0	0	0	0	0	0
Total imports	1,443	1,393	1,570	1,588	1,905	3,124	1,887	2,377	2,796	3,011	3,226	2,787
Tariff-rate quota imports 5/	1,158	1,051	1,098	1,113	1,277	2,348	1,473	1,229	1,243	1,682	1,662	1,142
Other Program Imports	216	269	443	421	454	317	354	513	279	408	272	318
Non-program imports	69	73	29	54	174	459	60	636	1,274	920	1,292	1,327
Mexico 6/												
Total Supply	11,408	10,537	10,599	10,949	10,771	11,044	11,088	11,404	11,138	11,637	11,804	11,602
Total exports 3/	128	125	129	261	235	184	383	184	123	191	227	181
Quota-exempt for reexport	128	125	129	261	235	184	383	184	123	191	227	181
Other exports	0	0	0	0	0	0	0	0	0	0	0	0
CCC disposal, for export	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous	112	-22	146	20	85	-61	-120	0	0	-41	0	0
CCC disposal, for domestic non-food use	9	0	0	0	0	0	0	0	0	0	0	0
Refining loss adjustment	0	0	0	0	0	0	0	0	0	-41	0	0
Statistical adjustment 7/	103	-22	146	20	85	-61	-120	0	0	0	0	0
Deliveries for domestic use	9,191	9,048	8,810	8,946	9,243	9,381	9,194	9,710	9,623	10,117	10,192	10,265
Transfer to sugar-containing products												
for exports under reexport program	89	141	166	129	110	96	153	128	109	183	177	136
Transfer to polyhydric alcohol, feed	30	30	22	38	44	46	48	56	42	31	36	36
Deliveries for domestic food and beverage use 8/	9,072	8,877	8,622	8,780	9,089	9,239	8,993	9,527	9,472	9,903	9,979	10,092
Total Use	9,431	9,151	9,084	9,228	9,563	9,504	9,457	9,895	9,746	10,267	10,419	10,446
Ending stocks 2/	1,977	1,386	1,515	1,721	1,208	1,540	1,632	1,510	1,392	1,370	1,385	1,156
Privately owned	1,266	1,194										
CCC	711	192										
<i>Percent</i>												
Stocks-to-use ratio	20.97	15.15	16.68	18.65	12.63	16.21	17.25	15.26	14.28	13.35	13.30	11.06

NOTE: Numbers may not add due to rounding.

1/ Fiscal year beginning October 1. 2/ Stocks in hands of primary distributors and CCC. 3/ Historical data are from FSA (Farm Service Agency), *Sweetener Market Data* (SMD), and NASS, Sugar Market Statistics prior to 1992. 4/ Production reflects processors' projections compiled by the Farm Service Agency.

5/ Actual arrivals under the tariff-rate quota (TRQ) with late entries, early entries, and (TRQ) overfills assigned to the fiscal year in which they actually arrived.

The 2010/11 available TRQ assumes shortfall of 81,879 tonnes. 6/ Starting in 2007/08, total includes imports under Mexico's WTO (World Trade Organization)

TRQ allocation for raw and refined sugar. 7/ Calculated as a residual. Largely consists of invisible stocks change.

8/ For FY 2008-09, combines SMD deliveries for domestic human use, SMD miscellaneous uses, and the difference between SMD imports and *World Agricultural Supply and Demand Estimates* imports.Source: USDA, Foreign Agricultural Service, *World Supply and Demand Estimates*.

Mexican Sugar and High Fructose Corn Syrup

Production

The *Comite Nacional Para El Desarrollo Sustentable de la Cana de Azucar* (CNDSCA) estimates Mexican sugar production through June 29, 2011 at 5,183,500 tonnes, or 5,494,510 metric tons, raw value (MTRV).² All factories except one have completed the harvest season through the end of June. In recent years, additional production not recorded during the season has been added to the preliminary total after the harvest has been completed. Even allowing for this, production should end up at around 5.500 million MTRV when all has been tallied. Accordingly, this amount is the USDA production estimate, a reduction of 50,000 MTRV from last month.

Table 7 breaks out several production statistics by region and state for 2010/11 and 2009/10. Sugar production in 2010/11 is estimated 7.4 percent higher than last year (fig. 6). Area harvest, at approximately 671,000 hectares, is about 3.6 percent higher than last year, but the national sugarcane yield, at 65.8 tonnes per hectare, is less than last year's yield by 1.7 percent. Sugar per hectare increased 3.7 percent to 7.73 tonnes, and sugar recovery increased 5.6 percent over last year to a record 11.75 percent.

Figure 7 compares regional sugar production in 2010/11 with production in 2009/10. The largest sugar production gain occurred in the Northeastern states of San Luis Potosi and Tamaulipas—324,612 tonnes, or 67.3 percent, over last year's low production total of only 482,000 tonnes. Although area increased by 10.3 percent, sugarcane yield bounded back by 34.8 percent to 64.3 tonnes per hectare. Sugar in the largest producing region of Veracruz and Oaxaca increased by 6.4 percent to 2.198 million tonnes, aided in particular by high sugar content and excellent recovery of 11.8 percent. Sugar in central Mexico (Morelos and Puebla) increased by a similar percentage, but the growth resulted more from increased harvested area of about 9.1 percent. Sugar in the southern states was slightly less than last year, and sugar in western Mexico, the second largest producing region, decreased by 9.6 percent to 1.140 million tonnes due to poorer yields and no growth in area harvested, compared with last year.

The USDA continues to project 2011/12 Mexican sugar production at 5.650 million MTRV. Several observers have noted that extremely dry conditions have prevailed in the primary sugarcane growing areas, and a production decrease in 2011/12 of 10 percent is possible. Nonetheless, heavy rainfall in late June has placed April-July precipitation totals through July 5 at 27 percent higher than average in Veracruz and slightly above the average in the western producing region (figs. 8 and 9). The CNDSCA has not yet made a projection of 2011/12 sugar production.

Trade in 2010/11

The USDA reduced its estimate of Mexican sugar exports by 100,000 MTRV to 1.282 million MTRV. Although monthly exports averaged 140,690 MTRV for the first 8 months of 2010/11, a preliminary estimate for June 2011 is less than 20,000 MTRV. Although the export pace should pick up in the remaining 3 months of 2010/11, the monthly average is expected to be much less than for the first 8 months – more on the order of 45,000 MTRV. Sugar imports are still estimated for 2010/11 at 472,000 MTRV. This total includes the recently announced TRQ for 150,000 tonnes, with 15,000 tonnes allocated to Nicaragua. Although the USDA is assuming that all this sugar enters in 2010/11, it is possible a portion will enter in the next year beginning October 1.

Deliveries of Sugar and High Fructose Corn Syrup

The CNDSCA published sweetener delivery data for 2010/11 through May. As seen in figure 10, sugar deliveries are estimated at 2.671 million tonnes, a reduction of 12.4 percent compared with 2009/10. Deliveries of high fructose corn syrup (HFCS) are estimated at 1.050 million tonnes, dry weight, an increase of 20.9 percent. Overall sweetener deliveries sum to 3.721 million tonnes, a decrease of 5.0 percent compared with 2009/10.

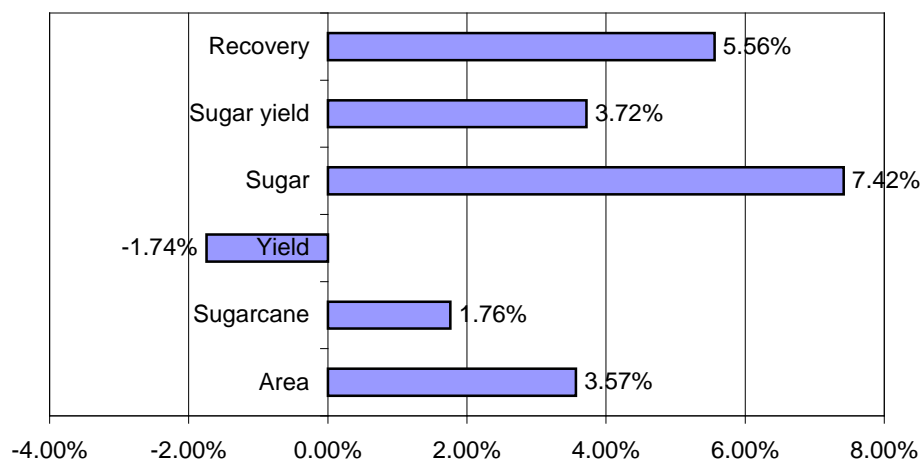
² Tonne = metric ton.

Table 7--Mexico sugar production statistics, 2009/10 and 2010/11, by region and state

	2010/11						2009/10					
	Area -Hectares (ha)	Sugarcane -Tonnes	Yield -Tonne/ha	Sugar -Tonnes	Sugar yield -Tonne/ha	Recovery -Percent	Area -Hectares (ha)	Sugarcane -Tonnes	Yield -Tonne/ha	Sugar -Tonnes	Sugar yield -Tonne/ha	Recovery -Percent
East	315,293	18,629,832	59.09	2,197,861	6.97	11.80	310,896	19,226,268	61.84	2,066,104	6.65	10.75
Oaxaca	46,777	2,455,092	52.49	305,765	6.54	12.45	41,947	2,269,355	54.10	249,877	5.96	11.01
Veracruz	268,516	16,174,740	60.24	1,892,096	7.05	11.70	268,949	16,956,913	63.05	1,816,227	6.75	10.71
West	128,525	10,022,347	77.98	1,140,273	8.87	11.38	127,849	10,845,120	84.83	1,261,405	9.87	11.63
Colima	12,458	992,962	79.70	113,059	9.08	11.39	11,866	1,000,285	84.30	114,921	9.68	11.49
Jalisco	62,941	5,019,613	79.75	571,187	9.07	11.38	62,549	5,779,041	92.39	684,724	10.95	11.85
Michoacan	10,791	907,363	84.09	104,832	9.71	11.55	12,743	1,044,460	81.96	122,270	9.60	11.71
Nayarit	27,107	1,907,985	70.39	233,053	8.60	12.21	26,254	2,066,763	78.72	247,015	9.41	11.95
Sinaloa	15,228	1,194,424	78.44	118,142	7.76	9.89	14,437	954,571	66.12	92,475	6.41	9.69
Northeast	102,619	6,595,767	64.27	807,082	7.86	12.24	93,038	4,435,618	47.68	482,470	5.19	10.88
San Luis Potosi	74,299	4,549,329	61.23	576,060	7.75	12.66	66,598	2,994,518	44.96	332,275	4.99	11.10
Tamaulipas	28,320	2,046,438	72.26	231,022	8.16	11.29	26,440	1,441,100	54.50	150,195	5.68	10.42
South	93,436	5,667,429	60.66	627,243	6.71	11.07	87,561	5,752,063	65.69	629,273	7.19	10.94
Campeche	8,514	386,126	45.35	45,202	5.31	11.71	8,425	322,309	38.26	36,704	4.36	11.39
Chiapas	30,118	2,423,476	80.47	288,573	9.58	11.91	28,949	2,621,151	90.54	298,341	10.31	11.38
Quintana Roo	25,723	1,491,159	57.97	153,312	5.96	10.28	21,461	1,206,802	56.23	125,204	5.83	10.37
Tabasco	29,081	1,366,668	47.00	140,156	4.82	10.26	28,726	1,601,801	55.76	169,024	5.88	10.55
Central	30,794	3,216,196	104.44	411,041	13.35	12.78	28,231	3,109,316	110.14	386,310	13.68	12.42
Morelos	15,503	1,596,413	102.97	206,118	13.30	12.91	14,070	1,595,871	113.42	201,264	14.30	12.61
Puebla	15,291	1,619,783	105.93	204,923	13.40	12.65	14,161	1,513,445	106.87	185,046	13.07	12.23
Total Mexico	670,667	44,131,571	65.80	5,183,500	7.73	11.75	647,575	43,368,385	66.97	4,825,562	7.45	11.13

Source: CNDSCA.

Figure 6

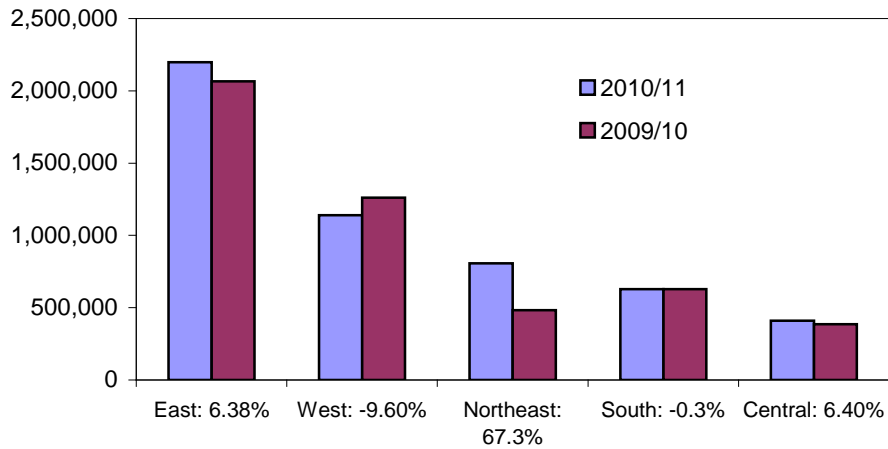
Mexico sugar statistics, percent change, 2009/10 to 2010/11

Source: CNDSCA.

Figure 7

Mexico sugar production, by region, 2010/11 and 2009/10

Tonnes, tel quel

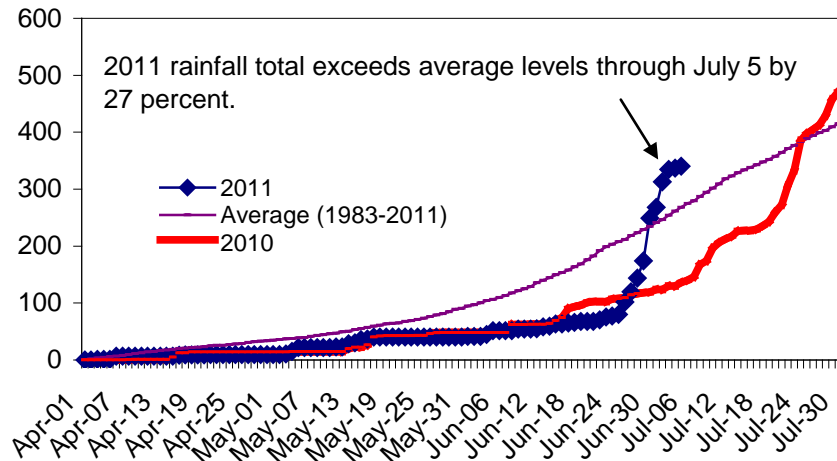


Source: CNDSCA.

Figure 8

Veracruz: cumulative precipitation, April-July

Millimeters

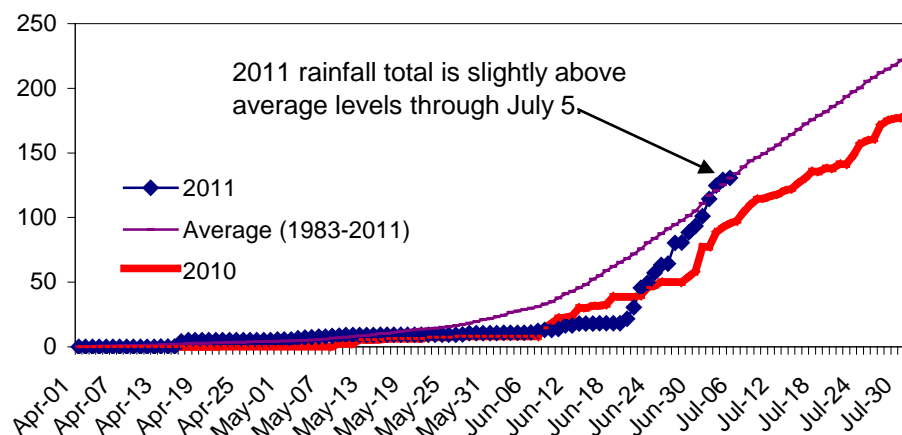


Source: USDA, WAOB, Agricultural Weather Assessments.

Figure 9

Western Mexico: Cumulative precipitation, April-July

Millimeters

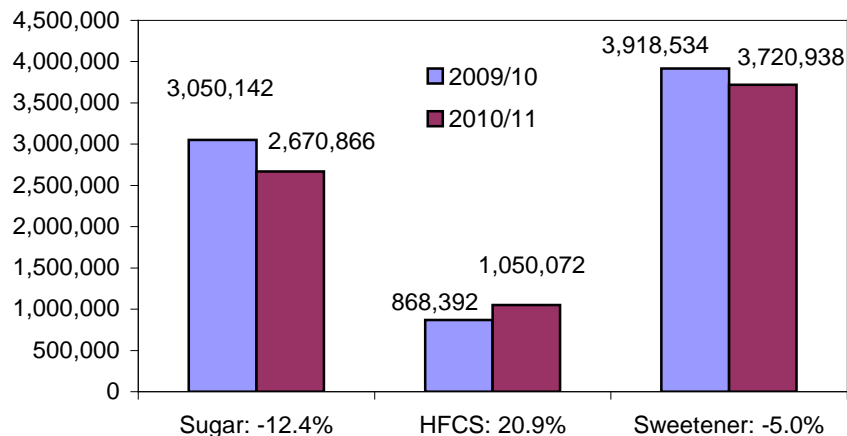


Source: USDA, WAOB, Agricultural Weather Assessments.

Figure 10

Sweetener consumption in Mexico, October-May, comparison of 2010/11 with 2009/10

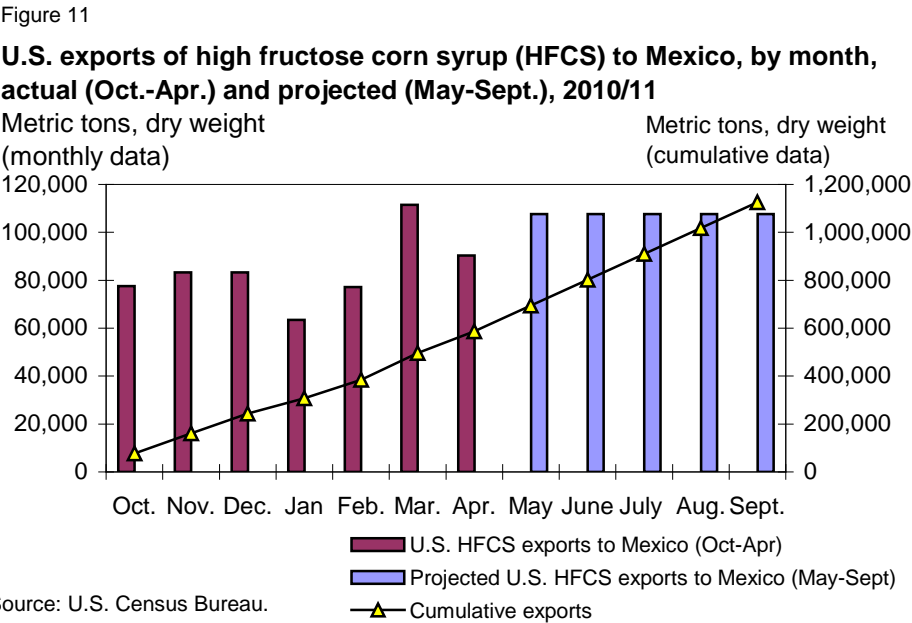
Metric tons, tel quel



Source: CNDSCA.

Up to this point, the USDA had been assuming that per capita sweetener consumption in Mexico would at least be equal to the 2009/10 level of 51.3 kilograms. However, with 8 months of consumption data from the CNDSCA indicating a 5-percent reduction from the corresponding period last year, it is not likely that sweetener consumption will rise proportionate to population growth.

The USDA proceeded through several steps to reach a revised sugar consumption forecast. Although HFCS consumption is 20.9 percent higher through May 2011, the pace of HFCS imports from the United States would have to increase dramatically to reach last month's projected 2010/11 HFCS consumption of 1.750 million tonnes. According to data from the U.S. Census Bureau, the United States has exported 586,545 tonnes, dry weight, of HFCS and crystalline fructose to Mexico from October 2010 through April 2011. The average monthly shipment is 83,792 tonnes, dry weight. Assuming that Mexico at full capacity is producing 475,000 tonnes of HFCS annually, monthly imports for the rest of the year (5 months) would have to equal 137,700 tonnes, dry weight, to reach 1.750 million tonnes, dry weight. This amount is more than 60 percent higher than the average for the first 7 months. The USDA reduced its projection of HFCS consumption by 150,000 tonnes to 1.600 million tonnes, dry weight. As seen in figure 11, HFCS and crystalline fructose exports would have to average 107,700 tonnes over the remaining 5 months to reach to 1.125 million tonnes.³ It is assumed that HFCS will constitute about 28.4 percent of total sweetener consumption, very close to the average through the first 8 months. This assumption implies total sweetener consumption of 5.634 million tonnes, and sugar consumption of 4.034 million tonnes, tel quel, or 4.277 million MTRV. Total per capita sweetener consumption is 49.5 kilograms, about 3.4 percent less than in 2009/10. Extending comparable averages ahead to 2011/12, total sweetener consumption is projected at 5.696 million tonnes, an increase of 1.1 percent. Sugar consumption is calculated at 4.087 million tonnes, tel quel, or 4.332 million MTRV. HFCS consumption in 2011/12 is projected at 1.609 million tonnes, dry weight.



³ This total plus domestic production equals the 1.6 million tonnes. Mexico imports small quantities of HFCS from Canada and other countries, but exports small quantities as well. It is assumed that these are offsetting each other.

Exports in 2011/12

Exports in 2011/12 are determined as a residual. Beginning stocks in 2011/12 are equal to 2010/11 ending stocks of 1.063 million MTRV. With 2011/12 production at 5.650 million MTRV and imports at 190,000 MTRV (mostly from the United States, intended for use in Mexico's product re-export IMMEX program), total supply is calculated at 6.903 million MTRV. Ending-year stocks are assumed at 22 percent of the 4.332 MTRV sugar consumption level, or 953,000 MTRV. With overall sugar deliveries to IMMEX set at 300,000 MTRV, exports are residually calculated at 1.318 million MTRV.

Table 8--Mexico: sugar production and supply, and sugar and HFCS utilization, 7/18/2011

Fiscal Year (Oct/Sept)	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11 1/	2011/12 1/
	1,000 metric tons											
Beginning stocks	1,063	1,548	1,172	1,194	1,237	1,965	1,294	1,718	1,975	624	973	1,063
Production	5,220	5,169	5,229	5,330	6,149	5,604	5,633	5,852	5,260	5,115	5,500	5,650
Imports	43	52	63	327	268	240	474	226	160	861	472	190
Supply	6,326	6,769	6,464	6,851	7,654	7,809	7,401	7,796	7,395	6,600	6,945	6,903
Disappearance												
Human consumption	4,481	5,004	5,097	5,380	5,279	5,326	5,133	5,090	5,065	4,615	4,277	4,332
Other consumption	142	180	135	220	282	323	390	414	475	302	323	300
Miscellaneous								-360	-136	-27		
Total	4,623	5,184	5,232	5,600	5,561	5,649	5,523	5,144	5,404	4,890	4,600	4,632
Exports	155	413	38	14	128	866	160	677	1,367	737	1,282	1,318
Total use	4,778	5,597	5,270	5,614	5,689	6,515	5,683	5,821	6,771	5,627	5,882	5,950
Ending stocks	1,548	1,172	1,194	1,237	1,965	1,294	1,718	1,975	624	973	1,063	953
Stocks-to-human consumption.	34.5	23.4	23.4	23.0	37.2	24.3	33.5	38.8	12.3	21.1	24.9	22.0
Stocks-to-use	32.4	20.9	22.7	22.0	34.6	19.9	30.2	33.9	9.2	17.3	18.1	16.0
HFCS consumption (dry weight)	600	263	130	135	355	667	698	782	653	1,418	1,600	1,609

1/ Forecast.

Source: USDA, Foreign Agricultural Service, PSD database (historical data); *World Agricultural Supply and Demand Estimates* (forecast data).

Maple Syrup

The longer tapping season of 32 days on average in 2011 versus 23 days in 2010 raised average syrup yield to 0.3 gallon from 0.2 gallon per tree tap. The 322,000 more taps in 2011 relative to 2010 and the 38-percent higher yield pushed syrup production up to 2.8 million gallons from 1.96 million gallons last year, a 43-percent jump. The largest production gains were in New York and Vermont, adding 252,000 and 250,000 gallons, respectively, to their 2010 outputs. These gains were achieved largely by 108,000 and 150,000 more tree taps in New York and Vermont over the 2011 sap flow season than in 2010.

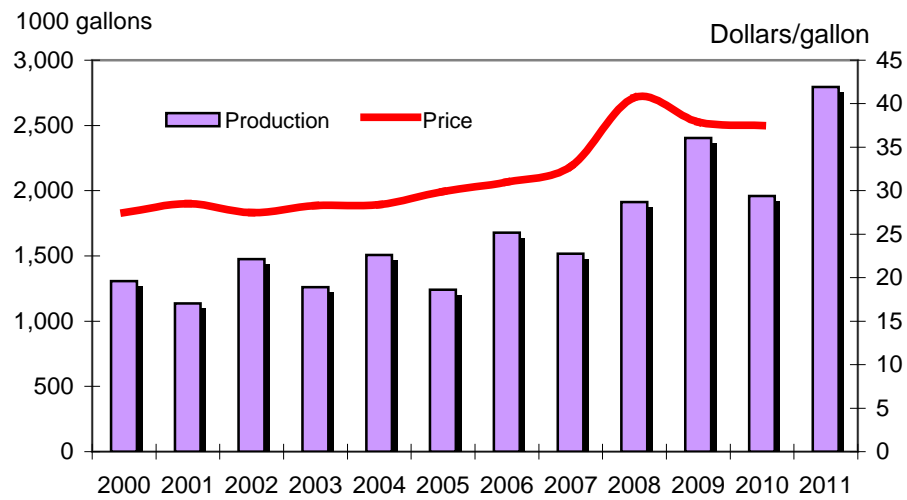
Given that U.S. imports of maple syrup from Canada are roughly 2.4 times larger than domestic production, the total U.S. supply of maple syrup in 2011 depends to a large extent on production volume in Canada this year and last. Although Canada's syrup production in 2010 was 20 percent lower than in 2009, production in 2011 is expected to be higher than in 2010, reflecting the U.S. gains, which are largely a function of more favorable weather conditions. From January to April 2011, import unit values of maple syrup shipments from Canada were up 2 percent. These shipments are largely from Canada's 2010 stocks, not from current production, for which prices are anticipated to be higher given more costly fuel oil used to distill sap into syrup.

The marginally lower price of maple syrup in 2010 than in 2009 is in part due to lower demand, as total consumption fell 16 percent. Per capita consumption of 2.3 ounces in 2010 was 17 percent less than the 2.8 ounces in 2009. This is the lowest use rate since the 2.1 ounces in 1999. Part of the reason for this drop is the reduced import share of syrup consumption, down to 84 percent from 94 percent in 1999. Per capita syrup consumption in 2011 may increase only if prices are not significantly higher than last year's. Larger expected imports from Canada this year will help keep prices in check, although the January-April 2011 import unit values for maple syrup are 2 percent higher than in 2010.

The lower U.S. syrup production volume in 2010, together with a 1 percent lower average price, reduced production value by 19 percent last year. Production value and value per tap declined in all producer States in 2010, despite lower prices only in Vermont and New York. Ironically, these two States are the production leaders in 2011, as maple tree farmers there significantly boosted their number of taps. Although not all producer States increased their tap numbers in 2011, all States raised production volumes at double-digit rates, mainly due to sharply higher yields. About 43 gallons of sap were used to produce 1 gallon of syrup this year, compared with 46 gallons last year. This indicates that the sugar content of the sap has risen due to beneficial temperatures. The other principal beneficiaries of these favorable conditions were Pennsylvania, Massachusetts, Ohio, and Connecticut. Together, New York and Pennsylvania produced nearly 90 percent more syrup this year, and the Midwest States' output climbed 53 percent, about twice the production growth of New England States. While New England's 58-percent share of total tree taps in 2011 is unchanged from last year, the region's share of production declined from 68 percent to 61 percent this year.

Figure 12

Maple syrup price is expected to rise in 2011



Source: USDA, National Agricultural Statistics Service, Maple Syrup.

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Tables from the *Sugar and Sweeteners Yearbook* are available in the Sugar and Sweeteners Briefing Room at <http://www.ers.usda.gov/briefing/sugar/>. They contain the latest data and historical information on the production, use, prices, imports, and exports of sugar and sweeteners.

Related Websites

Sugar and Sweeteners Outlook <http://www.ers.usda.gov/Publications/SSS/WASDE> <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documented=1194>
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